DETAILED ACTION

This office action is in response to the amendment filed September 16, 2011. Currently, claims 65-89, 93-95 and 104-111 are pending.

1. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site http://www.uspto.gov in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

Specification

2. The amendment filed May 17, 2010 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no

amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Any and all rational, reasoning, and support for the invention not included in the original disclosure at the original date of filing should be removed. The sections of the specification that are considered new matter not originally filed and included in the newly submitted specification are "Field of the Invention", "Background of the Invention" and “Summary of the Invention”. Should the applicant wish to keep these sections the subject matter included in them should be drawn solely from the originally filed specification as seen in the applicant's “Abstract”, “Brief Description of the Drawings” and “Detailed Description of the Drawings” which comprised the applicant’s original filed specification.

At least all subject matter pertaining to “classification system”, an accelerometer comprising "at least a coil…", “energy harvesting methods…” and “EPROM includes an emulator” are new matter and should be cancelled from the specification.

3. Applicant is required to cancel the new matter in the reply to this Office Action. Entry of new matter is not granted upon filling of an RCE.

Claim Objections

4. Claim 107 is objected to because of the following informalities:

At line 2 of claim 107, “system further” should be replaced with “system is further”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 65-89, 93-95 and 104-110 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 65 recites, "adjusting a deployment unit"; however, this is not adequately disclosed in the specification to enable one of ordinary skill in the art. Piezoelectric accelerometers are used as the applicant claims in reverse, they are known as piezoelectric actuators; however as the piezoelectric crystals only produce movement on the micrometer scale to suggest that they are capable of compressing a spring far enough to produce a force to adjust a sliding dashpot has not been adequately disclosed by the applicant's specification to enable one of ordinary skill in the art. Moreover, adjusting a sliding dashpot in this manner would not produce any appreciable difference in inflation pressure as the sliding dashpot would be adjusted on the same scale as the piezoelectric actuator thus producing a negligible change in area through which the inflation gas would flow thus also leading to a negligible change in inflation as the gas would merely accelerate through the orifice before slowing back and inevitably equalizing pressure between the inflation area and the airbag. Applicant's assertion that the subject matter is enabled without any showing or reference to the specification is ineffective in overcoming the rejection.

Claim 65 recites, "a memory device being operable for monitoring the weight"; which would invoke 112, 6th paragraph and is supported in the specification by an EPROM; however, this is not adequately disclosed in the specification to enable one of ordinary skill in the art. The equipment required to operate the erasable programmable read only memory is not disclosed by the applicant, for instance an ultraviolet light is not disclosed. Applicant's assertion that the subject matter is enabled without any showing or reference to the specification is ineffective in overcoming the rejection.

7. Claims 65-89, 93-95 and 104-110 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Any subject matter drawn to emulators, accelerometer coils, energy harvesting, classification systems (the system does not perform any classification), piezoelectric coil, coil wound on at least a mass, energy being generated, said gas and silicon substrates should be removed from the claims as they are not supported by the specification as originally filed and are therefore new matter.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 65-89, 93-95 and 104-110 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claims 65-89, 93-95 and 104-110, the claims are replete with indefinite, functional and operational language. Several examples follow:

Claim 65 recites "converting said weight measurements into one or more electrical signals, and communicating said electrical signals to said at least one computerized system" it is unclear from the claims and disclosure as to what this is referring to. Examiner suggests clarifying by reciting the specific structure (such as a strain gauge). Further, if this is the intended "apparatus" then it is unclear how the "resistance comprises one or more electrical signals".

Claim 68 recites "EPROM being…responsive to classified data for said at least one seated occupant"; however, it is unclear what is meant by the terminology as memory cannot by definition be responsive to data it is merely a means of storage and data is not stored at an address line as an address line is merely a means of locating data. Further it is unclear what is meant by "classified data".

Claim 70 recites "configured for correcting data about a changing occupant" renders the claim indefinite as it is unclear what is meant by the applicant.

Claim 72 recites "EPROM being operable for comparing identified weight data…and generating at least a new data" renders the claim indefinite as EPROM is a memory storage means which is not capable in itself of comparing or generating data.

Examiner reiterates that this is a listing of several examples not intended to completely detail each inaccuracy. The claims are replete with errors. Applicant is advised to perform a thorough revision of the claims, careful so as not to enter new matter.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 65-89, 93-95, 104, 106 and 108-110, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Steffens, Jr. et al., US Patent 5,413,378 in view of Turner et al., US Patent 5,956,703, and Mehney et al., US Patent 6,039,344.

In regards to claim 65-89, 93-95, 104, 106 and 108-110, Steffens, Jr. et al. discloses all of the claimed elements including a supplemental restraint system for a vehicle, comprising:

a weight-sensing unit (70) operatively secured beneath at least one seat (32) in said vehicle (Reference is made to column 3, lines 29-34 and Figure 1);

a computerized system (24) communicatively connecting said unit to a supplemental restraint system installed in said vehicle, said supplemental restraint system comprising at least one airbag system (120,104,88,102,80,150,110,103) each having at least one airbag, each said airbag system corresponding to one of said at least one seat;

said weight-sensing unit being configured for taking weight measurements, converting said weight measurements into one or more electrical signals, and communicating said electrical signals to said computerized system;

said computerized system being programmably configured to calculate an operating weight value from said electrical signals corresponding to said weight measurements for each said seat and to communicate said operating weight value to said airbag system corresponding to said seat;

and for mechanically adjusting a deployment unit (120) within said airbag system to deploy said at least one airbag with a deployment force and acceleration for airbag inflation that are proportionate to said weight measurements (Reference is made to column 4, line 55 – column 5, line 3 and Figures 1-3).

Steffens, Jr. et al. does not disclose, “each said airbag system being electronically configured for receiving said operating weight value” the operating weight is not transmitted to the airbag system because the main computer system is configured to analyze the operating weight and transmit to the airbag system the amount the system needs to adjust for the occupant; rather than each system determining for itself the amount to adjust. Essentially the responsibilities of the network are arranged in a different manner. Nor does Steffens, Jr. et al discloses EPROM.

Turner et al. discloses a network of ICs and a master processor wherein the ability to signal a driver circuit may reside with either an IC or the master processor. This teaches that a function may reside with either the central controller or a seat specific controller. Additionally Turner et al. discloses EPROM as a preferred means of storing configuration data for a network.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to try to modify the supplemental restraint system of Steffens, Jr. et al. to include a seat specific computerized system programmably configured to receive an operating weight value, from the computerized system (24), and to mechanically adjust a deployment unit for a respective seat, so as to separate the responsibilities of calculating an operating weight and determining to what degree to mechanically adjust a deployment unit, thus freeing the main computerized system to continue calculating operating weights. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to try to provide the seat specific computerized system, as discussed above, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art and further since it would only require applying a known networking method to a known apparatus that would result in a predictable result of splitting the computing requirements between the central and network ICs, thusly reducing the processing load on the central IC. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computerized system of Steffens, Jr. et al. in view of the teachings of Turner et al. to include EPROM so as to provide a secure storage means for configuration data, memory data or other data storage requirements, thus reducing chance of data corruption/errors in persistent data.

Steffens, Jr. et al. does not disclose a weight sensor positioned between a seat mounting structure means and floor means.

Mehney et al. discloses a weight sensor positioned between a seat mounting structure (30) and a floor means (16). Teaching it is desirable to mount the weight sensor so as to not depend on the deflection of the seat cushion but rather on the entire magnitude of the occupant acting on the seat frame. As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the weight sensor between the seat mounting structure means and the floor means, according to the teachings of Mehney and since it has been held that rearranging parts of an invention involves only routine skill in the art.

12. Claims 105, 107 and 111, are rejected under 35 U.S.C. 103(a) as being unpatentable over Steffens, Jr. et al., US Patent 5,413,378 in view of Mehney et al., US Patent 6,039,344.

In regards to claim 105, 107 and 111, Steffens, Jr. et al. discloses the claimed elements including a supplemental restraint system for a vehicle, comprising:

at least a seat (32) disposed with a mounting structure;

at least a weight sensing unit (70) operable for providing at least a first sensor signal;

at least a collision sensor (90) configured for providing at least a second sensor signal;

at least a computerized system (24) comprising a module for receiving said first and second sensor signals respectively;

at least a supplemental restraint system (100); and

wherein said first and said second sensor signals, respectively, comprise weight measurements and collision force measurements being controllable by said computerized system for deployment of said supplemental restraint system (Reference is made to Column 3, line 30 - Column 6, line 35);

wherein said supplemental restraint system is further configured for controlling airbag tension when a collision is sensed (Reference is made to Column 4, lines 24-38);

wherein said weight sensing unit further comprises apparatus for detecting seat occupancy (80, 84, 86), in communication with said computerized system operable for controlling the resistance of said supplemental restraint system (Reference is made to Column 3, line 52 - Column 4, line 23).

Steffens, Jr. et al. does not disclose a weight sensor positioned between a seat mounting structure means and floor means.

Mehney et al. discloses a weight sensor positioned between a seat mounting structure (30) and a floor means (16). Teaching it is desirable to mount the weight sensor so as to not depend on the deflection of the seat cushion but rather on the entire magnitude of the occupant acting on the seat frame. As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to try to provide the weight sensor between the seat mounting structure means and the floor means, according to the teachings of Mehney and since it has been held that rearranging parts of an invention involves only routine skill in the art.

Response to Arguments

13. Applicant's arguments filed September 16, 2011 have been fully considered but they are not persuasive.

Applicant’s arguments regarding new matter are not persuasive; the applicant has not provided any evidence that the new matter was in fact supported by the original disclosure. The applicant's argument that new matter should be entered as an RCE has been filed further illustrates that the applicant is unfamiliar with the patent prosecution procedures. The filing of an RCE does not entitle the applicant to enter new matter; should the applicant wish to add subject matter to the original disclosure a continuation-in-part should be filed.

14. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site http://www.uspto.gov in the Site Index under “Attorney and Agent Roster.” Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

Applicant's arguments directed to "accelerometer would produce voltage above the micrometer scale", "the "Energy" voltage dependency" and “one of ordinary skill would understand” are not persuasive. The original disclosure is directed to the accelerometer producing a movement that moves the sliding pot not a voltage, as such the arguments are not commensurate with the disclosure or the claims and if the arguments are directed to the intended operation and the original disclosure is incorrect then the original disclosure and claims are lacking enablement and essential subject matter. Furthermore, voltage is not produced on a micrometer scale. Accelerometers are not designed to be utilized as described. Piezoelectric actuators required additional structure to perform motion which would enable movement above the micrometer scale, such structure is not disclosed. Further there is no disclosure of the dashpot structure to enable it to perform as claimed. According to the drawings and disclosure the dashpot is not part of the valve structure and as such it is unclear how it operates.

Arguments directed to “Emulator falls within art definition of a computerized system”, are not persuasive; the mere disclosure of a computerized system does not entitle the applicant to then incorporate any subject matter ever related to a computerized system. This is another example of how an examination of this application reveals that applicant is unfamiliar with patent prosecution procedure.

Applicant’s arguments directed to the supposed differences in the inventions are not persuasive and do not rectify the deficiencies of the claims, which define the scope of the invention. The applicant's remarks are not commensurate with the claims or the rejection as formulated.

Furthermore arguments directed to the individual teachings of the references are not persuasive as they are a piecemeal analysis of the rejection rather than an analysis of the rejection as a whole including the motivation for the combination as made above.

Applicant's assertion of that “Mehney et al. is deficient and invalid” is unsubstantiated and ineffective in overcoming the prior art. According to 37 CFR 1.78, the applicant priority claims must be made within the later of four months from the actual filing date of the current application or sixteen months from the filing date of the prior-filed application. The priority claims made are not continuous between the dates for which priority is sought. Examiner urges the applicant to map the priority claims set forth; a gap in time will be seen before 10/20/2000, the document 09/692,096 does not have priority of the provisional application 60/079,496 as the provisional would be abandoned by 3/26/1999. There is no continuity chain, provided for within the time period allowed by 37 CFR 1.78, which would cover the time periods for which priority is being sought beyond 10/20/2000. As such the prior art utilized is proper.

Conclusion

15. It appears that the applicant in this application is a *pro se* applicant (an inventor filing the application alone without the benefit of a Patent Attorney or Agent). Applicant may not be aware of the preferred methods of ensuring timely filing of responses to communications from the Office and may wish to consider using the Certificate of Mailing or the Certificate of Transmission procedures outlined below.

CERTIFICATE OF MAILING

To ensure that the Applicant's mailed response is considered timely filed, it is advisable to include a "certificate of mailing" on at least one page (preferably on the first page) of the response. This "certificate" should consist of the following statement:

> I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on (date).
>
> (Typed or printed name of the person signing this certificate)
>
> (signature)

CERTIFICATE OF TRANSMISSION

Alternatively, if applicant wishes to respond by facsimile rather than by mail, another method to ensure that the Applicant's response is considered timely filed, is to include a "certificate of transmission" on at least one page (preferably on the first page) of the response. This method should be used by foreign applicants without access to the U.S. Postal Service. This "certificate" should consist of the following statement:

> I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300 (date).
>
> (Typed or printed name of the person signing this certificate)
>
> (signature)

These "Certificates" may appear anywhere on the page, and may be handwritten or typed. They must be signed, and the date must be the actual date on which it is mailed or transmitted.

For the purpose of calculating extensions of time, the date shown on the certificate will be construed as the date on which the paper was received by the Office, regardless of the date the U.S. Postal Service actually delivers the response, or the fax is “date-stamped” in. In this way, postal or transmission delays do not affect the extension-of-time fee.

In the event that a communication is not received by the Office, applicant's submission of a copy of the previously mailed or transmitted correspondence showing the **originally** signed Certificate of Mailing or Transmission statement thereon, along with a statement from the person signing the statement which attests to the timely mailing or transmitting of the correspondence, would be sufficient evidence to entitle the applicant to the mailing or transmission date of the correspondence as listed on the Certificate of Mailing or Transmission, respectively.

NOTICE TO APPLICANT: In the case of lost or late responses the use of other “receipt producing” forms of mailing a correspondence to the Patent Office, such as Certified Mail, or a private shipper such as FedEx, **WILL NOT** result in the applicant getting the benefit of the mailing date on such receipts. These receipts are not considered to be acceptable evidence since there is nothing to “tie-in” the receipt with the particular document allegedly submitted.

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARRY GOODEN JR whose telephone number is (571)272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry J Gooden Jr.
Examiner
Art Unit 3616

/BJG/

/Paul N Dickson/
Supervisory Patent Examiner, Art Unit 3616